



24-50 High-Torque Casing Tong

The Weatherford 24-50 high-torque casing tong provides 50,000 ft-lb (67,790 N•m) of torque capacity for running and pulling 10 3/4- to 24-in. casing. The tong has a unique gated rotary that completely encircles the casing to provide greater circumferential coverage, a smaller footprint, and lighter overall weight than conventional tong designs. For added safety, the hydraulic door interlock prevents tong operation while the doors are open or unlatched.

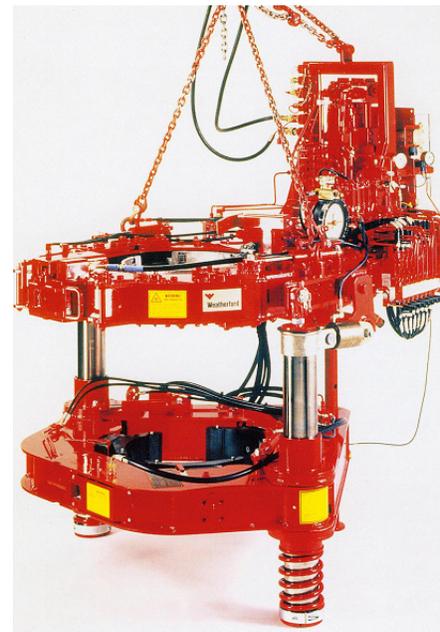
The 24-50 tong is capable of fully mechanized remote operation or semimechanized operation and is completely compatible with all Weatherford automated tong-positioning systems, including the patented* PowerFrame® and PowerScope® systems.

Applications

- Running and pulling 10 3/4- to 24-in. casing
- Making up and breaking out connections with high-torque requirements
- Performing offline or moonpool casing makeup operations

Features, Advantages, and Benefits

- The gated rotary completely encloses the casing to distribute gripping forces over a greater area, ensure a positive grip without pipe deformation or pipe marking problems, and avoid the risk of costly repairs.
- The integral hydraulic backup grips pipe and couplings without crushing, which saves repair costs.
- The tong design eliminates the need for large manual rig tongs as backup when running casing, which enhances personal safety.
- The patented free-floating backup design virtually eliminates shearing and bending when making up or breaking out connections. That reduces casing deformation and promotes long-term wellbore integrity.
- The tong is compatible with Weatherford JAMPro™ torque control systems.
- The versatile tong design enables running of casing in the moonpool or offline on rigs requiring these activities.



24-50 high-torque casing tong



24-50 high-torque casing tong installed in the PowerFrame system

*U.S. Patents

PowerFrame system	7114235
PowerScope system	6412553



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Specifications

Pipe size range	10-3/4 to 20 in. ^a	24 in. ^b
Rated torque in low gear at 2,500 psi (172 bar)	50,000 ft-lb 67,800 N·m	
Rated speed in high gear at 70 gal/min (265 L/min)	38 rpm	
Torque arm length	48 in. 1,219 mm	
Tong weight	2,300 lb 1,045 kg	
Tong dimensions	53 × 77 × 28 in. 1,346 × 1,948 × 711 mm	
Nominal power requirement flow at 1,000 psi (69 bar)	60 to 80 gal/min 227 to 303 L/min	
Nominal power requirement flow at 2,500 psi (172 bar)	30 to 40 gal/min 114 to 152 L/min	

^a20-in. rotary and jaws

^b24-in. rotary and jaws

